



European Monitoring Centre  
for Drugs and Drug Addiction

# Women who use drugs: Issues, needs, responses, challenges and implications for policy and practice

Background paper commissioned by the EMCDDA for  
Health and social responses to drug problems: a European guide

**Author**  
S. Arpa

2017

# **Women who use drugs**

## **Issues, needs, responses, challenges and implications for policy and practice**

**Sharon Arpa**

**September 2017**

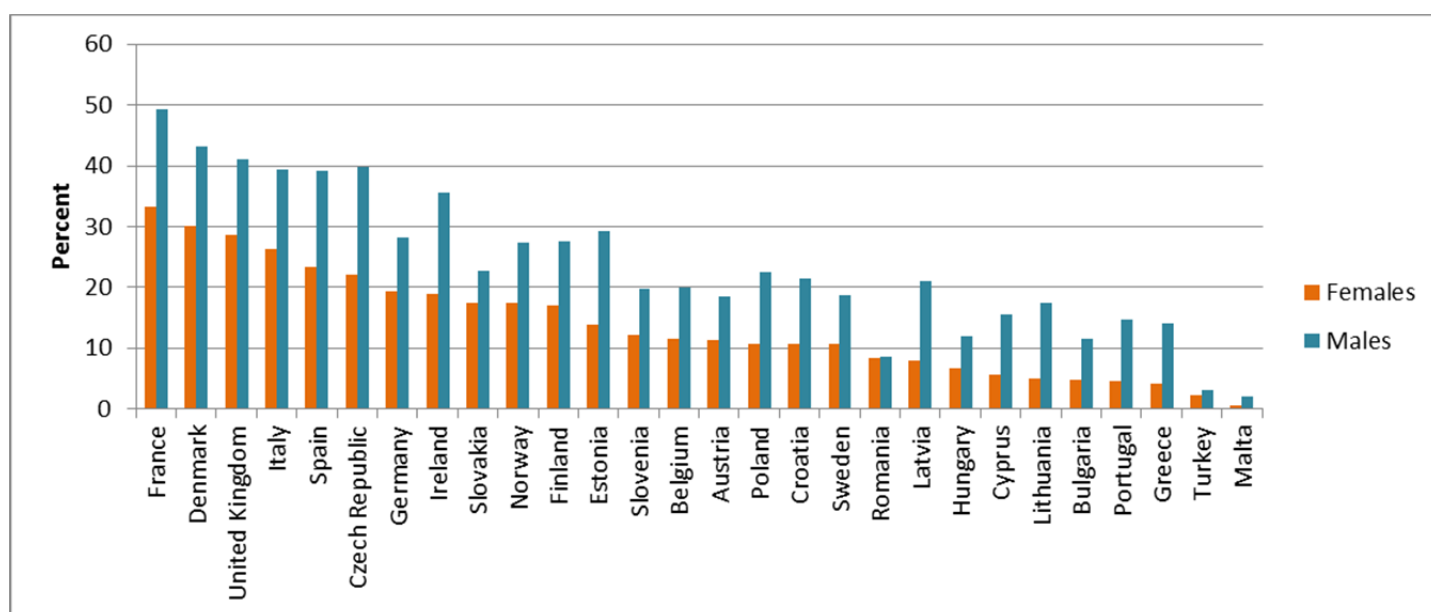
This paper was commissioned by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) to provide background information to inform and contribute to the drafting of *Health and social responses to drug problems: a European guide*.

This background paper was produced under contract CT.17.SDI.0003.1.0 and we are grateful for the valuable contribution of the author. The paper has been cited within *Health and social responses to drug problems* and is also being made available online for those who would like further information on the topic. However, the views, interpretations and conclusions set out in this publication are those of the author and are not necessarily those of the EMCDDA or its partners, any EU Member State or any agency or institution of the European Union.

# Introduction

In the European Union 34.8 million women aged 15 to 64 are reported to have ever tried an illicit drug, compared with 54.3 million men (EMCDDA, 2016a). Although there are some methodological differences between surveys, data from the latest general population studies available from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) Statistical Bulletin (2016) indicate variations between countries in the lifetime rates of any illicit drug use among this group of women (see Figure 1). The highest rates are found in France (33 %), Denmark (30 %) and the United Kingdom (29 %) and the lowest levels are reported in Malta (1 %), Turkey (2 %) and Greece (4 %). Drug use rates within countries are higher among younger than older women (EMCDDA, 2016b).

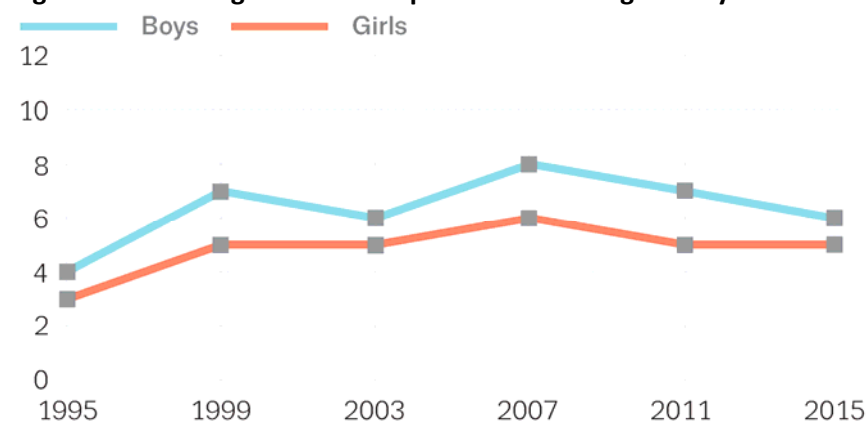
**Figure 1. Illicit drug use: lifetime prevalence in the general population**



Data source: EMCDDA Statistical Bulletin (EMCDDA, 2016b).

Figure 1 also highlights country-level variations in the drug use gender gap. Gender differences in drug use rates are wider in the case of intensive and regular drug use (Montanari, 2015) and narrower among younger than among older age groups (EMCDDA, 2016b). Trend data (see Figure 2) from the European School Survey Project on Alcohol and Other Drugs (ESPAD) show a recent narrowing of differences in the percentage of boys and girls aged 15 and 16 who use illicit drugs (ESPAD group, 2016). Again, differences are observed between countries, with lifetime prevalence rates being equal or slightly higher among girls than among boys in the Czech Republic, the Faroes, Malta and Iceland. ESPAD data indicate marked differences in the male to female gender ratio in Georgia and Albania (ESPAD and EMCDDA, 2017).

**Figure 2. Illicit drug use: lifetime prevalence among 15-16 year old students**



Source: ESPAD 2015 (ESPAD group, 2016).

Women make up approximately a quarter of all people with serious problems related to the use of illicit drugs and 20 % of all specialised treatment entrants (EMCDDA, 2016a). Some analyses show that women are more likely to access treatment, which may be due to the availability of specific services for women or treatment needs arising from pregnancy or parenting (EMCDDA, 2006). Other studies show that women may be less likely to seek specialised services than men, which may be linked to treatment barriers, including associated stigma (EMCDDA, 2006; Grella, 2015). In addition, women may be more likely to attribute their problems to physical or mental health issues and therefore seek care within these sectors (Greenfield et al., 2003). The extent and nature of the treatment gaps within different regions and subgroups in Europe is an area that requires further study that will need to take into account possible gender differences in underlying data quality.

Women and men who use drugs differ in various aspects, including social characteristics, consequences of substance use and development and progression to dependence (Tuchman, 2010); and women present unique concerns that are sex and gender based (NIDA, 2016). Despite these differences, many drug use interventions are male oriented (EMCDDA, 2009).

This document focuses on young and middle-aged adult women, generally within the age group 18 to 55, who misuse or are dependent on illicit drugs and who will be referred to in this paper as women who use drugs. This report will outline issues encountered by these women, as well as needs and responses, likely future developments in the area, major challenges and some implications for drug policy and practice. The focus is on treatment and support needs for women who have existing drug problems. While sex- and gender-based issues and requirements also need to be considered for the development and implementation of appropriate prevention responses, that is beyond the scope of this paper.

## Women who use drugs: general issues, needs and responses

Women who use drugs face particular issues over and above those experienced by men. For some women, these issues may act as obstacles to seeking, entering, engaging with and remaining in treatment.

Experiences of stigma are more likely among women who use drugs, who are often perceived as contravening ascribed roles, primarily those of mothers and caregivers. Discriminatory, disparaging and unsupportive responses from service providers may impede the access and use of required services (EMCDDA, 2009; Arsova Netzelmann et al., 2015; Benoit and Jauffret-Roustide, 2016). Services should, therefore, create environments that are welcoming, non-judgemental, non-discriminatory and supportive (Brentari et al., 2011; WHO, 2014). Anonymity and non-punitive policies would also encourage women to seek care by removing fear of negative reprisals (EMCDDA, 2009; Zermiani et al., 2013).

Women who use drugs may also have less social support than their male counterparts (EMCDDA, 2006; Arsova Netzelmann et al., 2015). For example, women are more likely than men to have families of origin that have substance use problems and to have a substance-using partner (Jones et al., 2007; Tuchman, 2010). Relationships are important in women's lives, and drug-using men play a role in their female partner's initiation into and continuation of drug use, including risk of relapse (Bloom et al., 2003; Grella et al., 2008; Neale et al., 2014; Arsova Netzelmann et al., 2015), risk of blood-borne infections (see Roberts et al., 2010) and exposure to violence (Neale et al., 2014; Benoit and Jauffret-Roustide, 2016). Substance-using men may also be more resistant to, and less supportive of, their partner's treatment, and women may fear damaging the relationship if they become drug free (UNODC, 2016). Relationships with children are also very important and children may play a central role in issues surrounding women's drug use and recovery (Grella, 2015). Given the importance women place on relationships, it is recommended that responses promote healthy connections to children, family members and significant others (Bloom et al., 2003). Family involvement can be an important adjunct to treatment and can enhance drug treatment effectiveness (Greenfield et al., 2007; Espinet et al., 2016; Selbekk, 2016; Slesnick and Zhang, 2016). Connections to the community are also important (UNODC, 2004).

Women are generally more biologically susceptible than men to blood-borne infections. For example, various features of the female genital tract enhance susceptibility to human immunodeficiency virus (HIV) infection (Reis Machado et al., 2014). Women who use drugs also have gender-specific vulnerabilities to blood-borne infections (Pinkham et al., 2012). HIV prevalence rates are higher among women who inject drugs than among their male counterparts (EMCDDA, 2006; Des Jarlais et al., 2012). In comparison with men, women who use drugs are more likely to share injecting paraphernalia and to share it with more people (Sherman et al., 2001), trade sex for drugs or money and have difficulties in negotiating condom use with sexual partners (Tuchman, 2010). Interventions to reduce the risk of blood-borne viruses should address issues such as relationship dynamics, housing and employment (to reduce reliance on partners and the need to trade sex), in addition to condom use and injecting practices (Pinkham et al., 2012), and should target individuals, couples and social networks (El-Bassel et al., 2010).

While not specific to drug users, economic burdens are heavier for women who use drugs than their male counterparts since they experience lower employment and income levels (EMCDDA, 2006). The cost of drug treatment may therefore act as a barrier to accessing treatment facilities when services are not provided by the state and there is a lack of insurance cover (Grella and Stein, 2013; Arsova Netzelmann et al., 2015). Transport costs to and from services may also impede access to treatment (Gilchrist et al., 2015). Women therefore require the necessary financial support to access

treatment. Responses should also address socioeconomic conditions (Bloom et al., 2003). Responses that include education, training and skills development, employment and housing are invaluable for many women (UNODC, 2004).

Overall, gender-responsive interventions are recommended to address the issues women face, incorporating women's needs in all aspects of their design and delivery, including structure and organisation, location, staffing, programme development, approach and content (UNODC, 2004; Covington, 2008; UNODC and WHO, 2016). Gender-responsive programmes may be female only or part of a mixed-gender programme that incorporates components and services for women (UNODC, 2004).

Holistic and comprehensive interventions are required to tackle the multiple issues and needs of women (Bloom et al., 2003). Grella (2015) highlights studies that indicate that the provision of a wider range of health and social services, particularly when services and needs are matched, is accompanied by better outcomes and satisfaction levels for women. Services may be integrated or coordinated through collaborative links between multiple services, sectors and disciplines.

## **Subgroups of women: issues, needs and responses**

Some subgroups of women who use drugs have particular needs, most notably women who have experienced or are experiencing trauma and violence, women with comorbidity and women who are pregnant, parenting, from ethnic minorities, involved in the sex trade and/or in prison. There are often overlaps between these vulnerable groups and women falling within multiple intersecting categories may have greater needs.

### **Women who have experienced trauma and violence and women who are currently experiencing domestic violence**

Women who use substances are more likely than men to have experienced traumatic events, such as sexual and physical assault and abuse as children and/or adults (UNODC, 2016) and to be currently exposed to intimate partner violence (Downs and Miller, 2002). The experience of trauma can lead to the development of post-traumatic stress disorder or other mental health problems and can also increase the risk of substance use (Najavits, 2009; Jonas et al., 2011).

This group of women requires interventions delivered in physically and emotionally safe environments (Brentari et al., 2011), and additional trauma-informed treatment approaches (Center for Substance Abuse Treatment, 2013; UNODC, 2016). Ongoing violence requires a multi-agency, multi-sector approach with collaborations between the health and social services and the justice sector (Haider, 2008). Female-only services may be needed for women whose male aggressors also utilise drugs services to reduce the risk of women encountering the perpetrator.

For women who have experienced trauma and those currently exposed to intimate partner violence, trauma-informed treatment approaches are recommended.

Ongoing violence requires collaborations between the health and social services and the justice sector.

## Women with comorbidity

Approximately half of substance users have co-occurring substance use and mental health disorders (EMCDDA, 2015a). The exclusion of people with a dual diagnosis from programmes or services may have a greater impact on women than on men, since some psychiatric disorders, such as anxiety, depression and post-traumatic stress disorder, and the use of psychoactive medication is more prevalent among women (UNODC, 2016). Substance use and mental health disorders should be addressed simultaneously using a multidisciplinary approach, with collaborating professionals from the drug treatment and the mental health sector working together towards common goals (EMCDDA, 2016c).

## Pregnant and parenting women

It is estimated that in each year in Europe approximately 30 000 pregnant women use opioids, and the number of pregnant women with other drug problems may be of a similar magnitude (Gyarmathy et al., 2009). This is of concern, since drug use during pregnancy is associated with a range of adverse effects on the pregnant woman, the unborn child and the newborn (EMCDDA, 2012a).

Pregnancy and motherhood can be a strong motivator in a woman's pathway to recovery (EMCDDA, 2009). However, stigma, shame and guilt (Kensy et al., 2012; Wendell, 2013; UNODC, 2016), and fear of having their children removed from their custody, may impede some women from seeking treatment and the health and social care required for themselves (EMCDDA, 2009, 2012a; INPUD, 2014; Arsova Netzelmann et al., 2015; UNODC, 2016), their partners and other family members (INPUD, 2014). Women may also be hesitant or unable to obtain the support they need because of family and other responsibilities and lack of childcare (Roberts et al., 2010; Grella and Stein, 2013; INPUD, 2014).

Interventions for pregnant women should address a broad spectrum of needs and provide coordinated interventions in areas that include drug use, gynaecological/obstetric care, infectious diseases, mental health and personal and social welfare (Gyarmathy et al., 2009). Multidisciplinary care programmes are provided in various countries, and some offer interventions to women who use drugs and their children from early pregnancy into childhood (EMCDDA, 2012a).

For opioid dependence in pregnant women, opioid substitution treatment, in addition to psychosocial assistance and other interventions, is recommended and usually provided (EMCDDA, 2014a; WHO, 2014). Many pregnant women who use opioids want to stop once they discover they are pregnant; however, detoxification and withdrawal during pregnancy is not advised. High relapse rates contribute towards fetal distress stemming from a sequence of intoxication and withdrawal, which is linked with adverse outcomes for the neonate, including miscarriage (WHO, 2009; WHO, 2014; Zedler et al., 2016). Women should therefore be encouraged to initiate or continue opioid substitution medication (WHO, 2009, 2014; Zedler et al., 2016). In Europe, methadone is the most commonly prescribed opioid substitution medication (EMCDDA, 2016a). Buprenorphine is also safe and effective (Krans et al., 2016) and is associated with superior neonatal outcomes (EMCDDA, 2014a; Zedler et al., 2016). WHO guidelines (2014) recommend that opioid-dependent pregnant women who are already using methadone or buprenorphine should not switch substances unless they are not responding well to treatment.

A range of interventions are available to parenting women including addiction treatment and integration of children that had been taken into care into their biological family. Women may also be provided with psychosocial support and interventions to empower them and build skills with the aim of strengthening the family (EMCDDA, 2012a). Services should also deal with practical concerns and

provide childcare and residential services should provide child-friendly accommodation, enabling mothers to stay with their children (EMCDDA, 2009).

Service for pregnant women should address a spectrum of needs including gynaecological/obstetric care and substitution treatment in the case of opioid dependence.

For parenting women, interventions to build skills and strengthen the family and practical concerns such as childcare provision and child-friendly residential services may also be required.

## Women involved in the sex trade

Involvement in the sex trade is often intertwined with drug use (Roberts et al., 2010). Estimates of female injecting drug users involved in sex work are as high as 20-50 % in eastern Europe (Rhodes et al., 2002). Women involved in the sex trade face a range of barriers to accessing support and these women require particular efforts to support them in accessing services (DrugScope and AVA, 2013). Measures such as evening opening hours, mobile outreach services, childcare and open access support can help (DrugScope and AVA, 2013). Stigmatised and negative responses may be greater for these women (UNODC, 2016). A non-judgemental and empathetic approach, peer support and women-only provision are recommended. Women who trade sex are more likely to experience violence and many have limited power to engage in safe sex or safe injecting practices, placing them at an increased risk of infections (Azim et al., 2015). A range of interventions from needle exchange to treatment and support with employment and housing should be made available (DrugScope and AVA, 2013).

Women involved in the sex trade often need additional efforts to support them in accessing services, such as evening opening hours and mobile outreach services.

Efforts, such as peer support, are required to counter the additional stigma these women may face.

A range of interventions from needle exchange to treatment and support with employment and housing should be made available.

## Women from ethnic minorities

Ethnic minorities are diverse, incorporating groups from various regions and that practise different religions and traditions. Their members also vary in terms of length of residence in the current region, from recent migrants, including refugees and asylum seekers, who may not speak the local language, to long-term residents and those who were born in the region. In addition to economic burdens, social exclusion and over-representation in the criminal justice system, some ethnic minority women may also be migrants who have experienced trafficking and trauma as a result of war and violence in the places they have left (Fountain et al., 2002). Women from ethnic minorities may encounter additional barriers when accessing treatment services, including language difficulties, aspects of treatment that are incompatible with religious or cultural practices (UNODC, 2016) and



immigration status that affects service eligibility, as well as perceived or actual racism and discrimination (Roarty and Saggars, 2009).

Ethnic, cultural and religious diversity needs to be considered when working with this group of women (UNODC, 2016). To help women from ethnic minorities attend and engage in treatment consideration should be given to outreach workers who can act as cultural mediators (UNODC, 2016), to interpreter services or service provision in the women's native language and to cultural aspects, so that programmes match the women's socialisation and cultural practices (Center for Substance Abuse Treatment, 2013).

Ethnic, cultural and religious diversity needs to be considered when providing services to women from ethnic minorities.

Outreach workers who can act as cultural mediators and interpreters may also be required.

## Women in prison

Many women in prison use drugs. A systematic review, which included mainly US-based studies, reported that, in the month before prison entry, 30-60 % of women were dependent on or used illicit drugs (Fazel et al., 2006). Compared with women in community-based substance abuse treatment, women offenders with substance use problems experience similar issues, although the severity of the problems tends to be greater (WHO Regional Office for Europe, 2009; Grella, 2015). The complexity of their problems is typically coupled with a lack of appropriate services to meet their psychological, social and healthcare needs (EMCDDA, 2012b; Kolind and Duke, 2016). Although prisons are high-risk environments for unsafe drug using behaviour and for the transmission of blood-borne infections, harm reduction activities, especially access to clean syringes, remain controversial (Stover and Hariga, 2016) and are often opposed on the grounds that they are perceived to contradict the goal of a drug-free prison (EMCDDA, 2012b). The absence of these activities may have a greater impact on women than men, as it has been found that, in the European Union, a higher proportion of women prisoners than of male prisoners inject drugs (EMCDDA, 2004).

As a result of their complex needs, these women require diverse interventions while in prison and following release (WHO Regional Office for Europe, 2009; Mir et al., 2015). They can benefit from gender-responsive, trauma-informed, integrated interventions that address multiple issues in addition to substance use, such as trauma, mental health, physical and reproductive health, and infectious disease risk behaviours (WHO Regional Office for Europe, 2009; Messina et al., 2010). Needle and syringe programmes in prisons are also recommended (UNODC, 2012). At Hindelbank women's prison in Switzerland and Vechta women's prison in Germany, syringes can be exchanged via slot machines (WHO Regional Office for Europe and the Pompidou Group, 2002). Other recommendations include drug substitution treatment for women with opioid addiction problems (UNODC, 2008) and psychosocial interventions (Covington, 1998). Preparing women for release includes supporting them to enhance their housing and financial situations, develop vocational and life skills, and rebuild social support networks and family relationships. Throughcare to drug treatment in the community is also required (UNODC, 2008).

The issues facing women who use drugs in prison are similar to, but more severe than, those experienced by other women who use drugs, which reinforces the need for gender-responsive, trauma-informed, integrated interventions that address multiple issues.

Given the particularly high rates of drug use among female prisoners, needle and syringe programmes in prison, preparation for release and throughcare to drug treatment in the community are of particular importance.

### Key issues

Compared with men who use drugs, women may:

- face higher levels of stigma and shame;
- carry heavier socioeconomic burdens;
- receive less social support;
- be more influenced by their parental role in issues concerning drug use and recovery;
- have a partner who plays a role in their:
  - drug use initiation, continuation and relapse,
  - exposures to blood-borne infections,
  - exposure to violence.

Compared with men who use drugs, women are more likely to:

- have gender-specific vulnerabilities to blood-borne infections;
- have experienced a traumatic event;
- have anxiety, depression or post-traumatic stress disorder and use psychoactive medication.

## Summary of general recommended responses

Responses should:

- be gender responsive, incorporating women's needs in all aspects of their design and delivery;
- be delivered in environments that are welcoming, non-judgmental, supporting and physically and emotionally safe;
- be holistic and comprehensive in order to address the multiple issues that women face;
- promote healthy connections to children, family members, significant others and the community;
- address socioeconomic conditions.

## Examples of interventions for women who use drugs

### **Women who have experienced trauma**

In the women-only, abstinence-based, trauma-informed, residential rehabilitation service in the United Kingdom, women participate in a range of group therapies based on a manualised, trauma-informed treatment programme. The women are also offered individual counselling and eye movement desensitisation and reprocessing, which is used to help with the distress associated with trauma and family support in accordance with their specific needs. In addition, the residents can benefit from a structured programme comprising education skills, training and recreational activities, and may attend peer support groups (Narcotics Anonymous and Alcoholics Anonymous). After successful completion of treatment, women move into their own accommodation or into one of the organisation's resettlement houses; ongoing support from the service and other organisations can still be accessed if required (Tompkins and Neale, 2016).

### **Women with comorbidity**

In Malta, the Female Dual Diagnosis Unit is a preliminary residential unit where women generally stay for maximum of six weeks. During this time, women undergo a detoxification programme and receive services from a multidisciplinary team, which includes a consultant psychiatrist, a doctor, a nurse, a psychologist and a social worker. Women may also receive external services, to which they are accompanied, including services to assist them with finding employment (Dalli, 2014; Camilleri, 2017<sup>1</sup>).

### **Pregnant and parenting women**

In Hungary, the Józan Babák Klub targets pregnant women or mothers with a child under the age of two. It takes a three-step approach. In step 1, women can contact a member of the Józan Babák Klub, which is self-help group that provides information about the available services. In the second step, medical, legal, social and psychological services can be utilised on an anonymous basis from the Józan Babák Klub. At this stage, if the pregnant or parenting woman participates in professional counselling for an average of 60 minutes over eight sessions, she receives a grant of EUR 11 per session. In step 3, the organisation facilitates contact with the required healthcare, social or legal services and, in the case of pregnant women, with prenatal services. During steps 2 and 3, a member of the Józan Babák Klub self-help group will accompany the women to any of the services, if requested (Tarján, 2012).

The Kangaroo project, a programme in Belgium targeting parents within a residential setting, aims, in part, to maintain or enhance parents' links with their children. Women are supported in their parenting role. During the day, children attend nursery, kindergarten or school, while mothers attending the therapeutic programme undertake activities. The project provides information to parents, facilitates parent-child activities and thematic groups, and offers individual consultation and someone to accompany parents to appointments (Deprez et al., 2011; Ferri et al., 2015).

In the United Kingdom, the Family Drug and Alcohol Court service provides an alternative to care proceedings in cases in which parental substance misuse plays a major role. It directs parents through a different pathway to help parents cease or stabilise substance use to keep families together and enhance child and parent outcomes. Following assessment, diverse services

---

<sup>1</sup> Camilleri, Marthese (Personal communication, 15 March 2017).

appropriate to the various needs of each family are provided. They are delivered by a multidisciplinary team, which includes a nurse, a substance misuse worker, social workers, psychiatrists, a family therapist and a service manager. Issues dealt with may include substance use, physical and mental health, parenting, relationships with children and other family members, domestic violence and housing (The Tavistock and Portman NHS Foundation Trust, n.d.). An evaluation has highlighted positive aspects of the service (Alrouh et al., 2014).

The SAOL project is a community based project in Ireland. It provides services to women currently attending a drug programme. One of its aims is to educate and train women to support them in achieving employment. Childcare assistance is also provided in this regard through a children's centre, which focuses on early childhood education (North Inner City Drugs Task Force, 2014).

### **Women in prison**

A drug recovery wing within a women's prison in the United Kingdom, which was evaluated more positively than one other in a process and impact evaluation, was described as being physically separate from the rest of the prison. The programme is run by drug workers within an environment that provides physical and emotional safety. It takes a holistic approach and time is dedicated towards recovery, as well as education and/or employment issues, community activities and physical activity. Women can also access drug treatment and general support from agencies outside prison (Grace et al., 2016).

The Quartier Intermédiaire Sortantes is a pre-release unit based near Paris for women in prison who have drug use-related problems. It prepares women in the last month of imprisonment for release. The internal and external staff who conjointly run the voluntary programme provide information, advice and support on a variety of topics, including health issues (e.g. health promotion, healthcare and harm reduction); support networks (e.g. re-establishing links with family and children; supporting agencies for sex workers); and training in everyday skills (e.g. household tasks, cooking and financial management). External experts help create links that can be used within the community following release (EMCDDA, 2006).

### **Women involved in the sex trade**

Ragazza is an organisation in Germany offering low-threshold services to women involved in sex work. The all-female multi-disciplinary team includes social workers, nurses, educational assistants and doctors. The association provides a contact point that offers anonymous counselling and advice on a range of issues including safer drug use, safer sexual practices, safer work, pregnancy and family matters and advice on treatment interventions, as well as housing, financial and legal issues. Case management and support, which may include accompanying women to various appointments, is also offered. The organisation also has a drug consumption room, which aims to minimise harm to drug users and reduce drug emergencies through the provision of clean needles, hygienic conditions for drug use, emergency treatment, if required, and advice on safe drug use. Treatment of wounds, infections and medical care, including gynaecological care, is also provided within a medical room. In addition, the organisation offers emergency beds during specified times and engages in outreach street work, offering supplies (condoms and lubricant), hot and cold drinks, on-the-spot advice, information on the services provided by Ragazza and contacts to other services (information available from the Ragazza website following links under the section 'Offer'; Ragazza, n.d.).

# Future developments in the area, challenges and implications for drug policy and practice

## Future developments

With likely reductions in Europe in the discrepancy between men and women in the demand for drug services, further implementation and expansion of services that aim to meet the needs of women is required. This may be facilitated by the increasing awareness and promotion of gender-responsive policies and programmes at various levels. In the light of changing trends in drug use (EMCDDA, 2016a), new developments may be required in interventions that cater for women who have problems related to the use of cannabis, which is the substance that now creates the most demand for treatment in Europe (EMCDDA, 2015b, 2016a), as well as prescription drugs, new psychoactive substances (NPS) and polydrug use. A focus on providing interventions that also cater for older women may be necessary. In European countries, there have been developments in intervention delivery methods. Internet-based drug treatment, which has been defined as 'specifically elaborated or adapted, structured drug treatment interventions, offered on and communicated over the internet' (EMCDDA, 2014b, 1), can be expanded to provide an array of women-centred activities that can be used alone or as an adjunct to other interventions. These may appeal specifically to some groups of women who are not fully covered by specialised drug services and may help overcome some logistical and structural barriers in accessing traditional treatment by reducing or eliminating issues such as transport requirements, inflexible opening hours and childcare needs. It may also reduce fear of being seen near drug treatment centres.

## Challenges and implications for drug policy and practice

It is necessary to ensure that policies and practices are gender mainstreamed and that women who use drugs participate in the planning, formation and development of programmes and policies (INPUD, 2014). Women must be empowered to participate. Current policies need to be examined and amended accordingly. To fully address the issue of drug use among women, the misuse of prescription drugs must be included in policies and strategies (Women's Health Council, 2009; Clark, 2015).

Funding is a challenge in many European countries (Cyprus Anti-Drug Council and Cyprus Monitoring Centre for Drugs and Drug Addiction, 2012; Ferri et al., 2015). Across Europe many drug services are funded by national, regional and local authorities and by non-governmental organisations (EMCDDA, 2011). In times of budgetary constraints, programmes for women may be neglected because women make up the minority of drug service users. It has also been suggested that gender-responsive programmes cost more (Burgdorf et al., 2004), although there is not sufficient evidence to substantiate this. Examining the cost-effectiveness of interventions that meet the needs of women within the diverse settings found across Europe is necessary to help ensure that interventions provided are effective and economically viable. Securing long-term funding is also necessary (Ferri et al., 2015).

There are still large knowledge gaps in various aspects of women's drug use. The field is hindered by the fact that studies do not always include women or consider sex and gender in their design, and do not always disaggregate data by gender, conduct gender analyses or address gender issues (UNODC, 2004; Roberts et al., 2010; Greenfield et al., 2011; Springer et al., 2015). In addition, a great deal of the research and responses available in relation to women who use drugs is oriented towards opioid users of child-bearing age. It is also often limited to those that address women's roles as mothers (e.g. Rolando et al., 2016). These issues, coupled with changing trends in drug use, necessitate further research on a broad range of areas (e.g. including prescription drugs, NPS and polydrug use)

and should include women of all ages from various subgroups (UNODC, 2016). The relevance and transferability of responses found to be effective elsewhere and the adaption required also needs to be examined. Research on issues including and specific to women who use drugs should, therefore, be encouraged to ensure that women receive high-quality, evidence-based responses.

The complex, overlapping issues faced by many women who use drugs requires coordinated and integrated services to address issues beyond drug use. These issues are often compartmentalised and networks separated. Across Europe, for example, there is often separation between drug use and mental health networks (EMCDDA, 2016c). Interdisciplinary coordination, collaborations and multifaceted approaches between settings and sectors are challenging (González-Guarda et al., 2011). Collaboration often relies on the goodwill of local stakeholders and cooperation at the individual level. To address this challenge, embedding collaboration into policies and strategies at higher levels is an important initial step (Benoit and Jauffret-Roustide, 2016).

Staff are required to have appropriate attitudes (non-judgemental, non-discriminatory and supportive) and adequate competency to encourage women who use drugs to access and engage with services and to intervene with them effectively (Center for Substance Abuse Treatment, 2013). This includes awareness of the unique needs of women (UNODC, 2016) and the importance of gender mainstreaming, together with the provision of required training (Rolando et al., 2016). In terms of drug service providers, the importance of knowledge and skills in areas other than substance use has been noted (e.g. Timko, 2012; Gilchrist et al., 2015). Service providers working in settings that intersect with drug use also need to embrace the same attitudes and have knowledge concerning drug use and responses (Brentari et al., 2011). Staff competency is facilitated through appropriate education, training, skills development and adequate supervision, and practitioners and policymakers need to ensure that this is addressed. Community agencies (e.g. child welfare system and healthcare providers) also require training to enhance awareness, identify women who use drugs and provide interventions or refer as necessary (e.g. UNODC, 2004; Clark, 2015).

### Some considerations for drug policy and practice

The following are recommended:

- implement and further expand services that meet the needs of women where indicated;
- enhance understanding of drug use trends, sociodemographic factors and issues faced by women within a given region to develop appropriate responses;
- reduce knowledge gaps by ensuring that research addresses gender issues and considers gender in all aspects of its design and analysis;
- ensure that existing and planned policies and practices are gender mainstreamed;
- facilitate the participation of women who use drugs in the planning, formation and development of policies and programmes;
- include the misuse of prescription drugs in policies and responses;
- provide coordinated and integrated services to address issues beyond drug use, which may require embedding collaboration into policies and strategies;
- ensure that staff from specialised drug services and other services, fields and disciplines who come into contact with women who use drugs have appropriate attitudes, knowledge and skills to enable women to receive appropriate responses;

- secure long-term funding for relevant programmes for women;
- conduct studies that examine the cost-effectiveness of interventions so that the interventions provided are effective and economically viable.

## Conclusion

Women who use drugs face a number of issues that vary in extent and nature compared with those experienced by their male counterparts. They have greater experiences of stigma, shame and discriminatory responses; have less social support; are more influenced in issues relating to drug use and recovery by their parental role and through their partners; and are at a greater risk of exposure to violence and blood-borne infections. In general, responses for women should be gender responsive, incorporating women's needs in all aspects of their design and delivery; be delivered in environments that are welcoming, non-judgemental, supporting and physically and emotionally safe; be holistic and comprehensive; promote healthy connections to children, family members, significant others and the community; and address socioeconomic conditions. There are also subgroups of women with additional issues and needs that need to be considered.

Several international instruments and documents focused on gender differences in drug responses have been drawn up and an array of policy statements, drug strategies, best practices, guidelines, standards and reports at various levels promoting responses that address the needs of women are available (UNODC, 2004; Salvati and Sabet, 2015; Shihadeh, 2015). However, gaps still exist. There are concerns over coverage of women's service in Europe (Cyprus Anti-Drug Council and Cyprus Monitoring Centre for Drugs and Drug Addiction, 2012) and the nature of services provided. For example, many interventions delivered to women were designed with men in mind. Gender-responsive interventions have tended to focus more heavily on opioid use and women's role as child-bearers and carers, paying less attention to women who use other drugs, are older or who form part of other subgroups. Gaps also include compartmentalisation of services for overlapping issues and the capacity of service providers.

Recommended actions include reducing knowledge gaps in relation to women's drug use and appropriate responses; increasing awareness and promotion of gender-responsive policies and programmes; introducing and expanding services that meet the needs of women who use drugs, irrespective of drug of use, age or subgroup; gender mainstreaming of policies and practices; ensuring the participation of women who use drugs in policy and programme development; and providing coordinated and integrated services to address issues beyond drug use. It is also necessary to secure long-term funding for programmes and ensure adequate staff competency and capacity.

Within the area of women's drug use, further epidemiological studies, sex-specific biomedical research, studies on treatment gaps, needs assessments, programme evaluations and cost-effectiveness studies are required. In particular, it is important to examine interventions that are effective for older women and women who are polydrug users and who use cannabis, prescription drugs and NPS. Such efforts, together, can help to address existing shortcomings and limitations, and ensure that effective, evidence-based interventions for women become the norm for the benefit of women and those impacted by their drug use.



## References

- Alrouh, B., Ryan, M. and Tunnard, J. (2014), *Changing lifestyles, keeping children safe: an evaluation of the first Family Drug and Alcohol Court (FDAC) in care proceedings* (available at <http://www.brunel.ac.uk/chls/clinical-sciences/research/ccyr/research-projects/fdac/?a=366370>; accessed 10 March 2017).
- Arsova Netzelmann, T., Dan, M., Dreezens-Fuhrke., J., Kalikov, J., Karnite, A., Kucharova, B., Musat, G. et al. (2015), *Women using drugs: a qualitative situation and needs analysis. Cross-country rapid assessment and response (RAR Report)*, SPI Forschung gGmbH, Berlin.
- Azim, T., Bontell, I. and Strathdee, S. A. (2015), 'Women, drugs and HIV', *International Journal of Drug Policy* 26, pp. 16-21.
- Benoit, T. and Jauffret-Roustide, M. (2016), *Improving the management of violence experienced by women who use psychoactive substances* (available at [https://www.coe.int/T/DG3/Pompidou/Source/Documents/Women,%20Drugs%20And%20Violence\\_en.pdf](https://www.coe.int/T/DG3/Pompidou/Source/Documents/Women,%20Drugs%20And%20Violence_en.pdf); accessed 2 January 2017).
- Bloom, B., Owen, B. and Covington, S. (2003), *Gender responsive strategies research practice, and guiding principles for women offenders*, National Institute of Corrections, Washington DC.
- Brentari, C., Hernandez, B. and Tripodi, S. (2011), *Attention to women drug users in Europe*, DCDII guidelines, European Project 'Democracy, Cities and Drugs Project II' (available at [http://www.democitydrug.org/uploads/DCD%20II%20WP5%20Guidelines\\_ENG.pdf](http://www.democitydrug.org/uploads/DCD%20II%20WP5%20Guidelines_ENG.pdf); accessed 23 December 2016).
- Burgdorf, K., Layne, M., Roberts, T., Miles, D. and Herrell, J. M. (2004), 'Economic costs of residential substance abuse treatment for pregnant and parenting women and their children', *Evaluation and Program Planning* 27, pp. 233-240.
- Center for Substance Abuse Treatment (2013), *Substance abuse treatment: addressing the specific needs of women*, Treatment improvement protocol (TIP) series 51 (4th edition), Substance Abuse and Mental Health Services Administration, Rockville, MD.
- Clark, M. (2015), *The gender dimension of non-medical use of prescription drugs in Europe and the Mediterranean region*, Council of Europe, Strasbourg.
- Covington, S. S. (1998), 'Women in prison: approaches in the treatment of our most invisible population', *Women and Therapy Journal* 21, pp. 141-155.
- Covington, S. (2008), 'Women and addiction: a trauma-informed approach', *Journal of Psychoactive Drugs* 40, pp. 377-385.
- Cyprus Anti-Drug Council and Cyprus Monitoring Centre for Drugs and Drug Addiction (2012), *Experts' opinions on available responses to women drug users: survey results and review of scientific literature*, Cyprus Antidrug Council, Nicosia.
- Dalli, M. (2014), *New female ward for mental health sufferers with drug problems*, MaltaToday (available at <http://www.maltatoday.com.mt/printversion/39859/#.WMwuxG8rLIU>; accessed 15 March 2017).
- Deprez, N., Antoine, J., Asueta-Lorente, J., Bollaerts, K., Van der Linden, T. and van Bussel, J. (2011), *Belgian national report on drugs 2011* (available at [http://www.emcdda.europa.eu/attachements.cfm/att\\_191785\\_EN\\_Belgium\\_2011.pdf](http://www.emcdda.europa.eu/attachements.cfm/att_191785_EN_Belgium_2011.pdf); accessed 3 March 2017).

Des Jarlais, D. C., Feelemyer, J. P., Modi, S. N., Arasteh, K. and Hagan, H. (2012), 'Are females who inject drugs at higher risk for HIV infection than males who inject drugs: an international systematic review of high seroprevalence areas', *Drug and Alcohol Dependence* 124, pp. 95-107.

Downs, W., and Miller, B. (2002), 'Treating dual problems of partner violence and substance abuse' in Wekerle, C. and Wall, A. M. (eds.), *The violence and addiction equation: Theoretical and clinical issues in substance abuse and relationship violence*. New York, NY: Brunner-Routledge. pp 252-272.

DrugScope and AVA (2013), *The challenge of change: improving services for women involved in prostitution and substance use* (available at [https://avaproject.org.uk/wp/wp-content/uploads/2016/08/Challenge-of-change\\_full-report.pdf](https://avaproject.org.uk/wp/wp-content/uploads/2016/08/Challenge-of-change_full-report.pdf); accessed 8 February 2017).

El-Bassel, N., Terlikbaeva, A. and Pinkham, S. (2010), 'HIV and women who use drugs: double neglect, double risk', *The Lancet* 376, pp. 312-314.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2004), *Annual report 2004: the state of the drugs problem in the European Union and Norway* (available at <http://ar2004.emcdda.europa.eu/en/page096-en.html>; accessed 9 January 2016).

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2006), *A gender perspective on drug use and responding to drug problems*, Publications Office of the European Union, Luxembourg.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2009), *Women's voices: experiences and perceptions of women facing drug problems in Europe*, Publications Office of the European Union, Luxembourg.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2011), *Cost and financing of drug treatment services in Europe: an exploratory study*, Publications Office of the European Union, Luxembourg.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2012a), *Pregnancy, childcare and the family: key issues for Europe's response to drugs*, Publications Office of the European Union, Luxembourg.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2012b), *Prisons and drugs in Europe: problems and responses*, Publications Office of the European Union, Luxembourg.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2014a), *Pregnancy and opioid use: strategies for treatment*, EMCDDA papers, Publications Office of the European Union, Luxembourg.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2014b), *Internet-based drug treatment*, Perspective on drugs, Publications Office of the European Union, Luxembourg.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2015a), *Comorbidity of substance use and mental disorders in Europe*, EMCDDA Insights, Publications Office of the European Union, Luxembourg.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2015b), *Treatment of cannabis-related disorders in Europe*, EMCDDA Insights, Publications Office of the European Union, Luxembourg.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2016a), *European drug report 2016: trends and developments*, Publications Office of the European Union, Luxembourg.

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2016b), *Statistical bulletin 2016 (data tables)*, <http://www.emcdda.europa.eu/data/stats2016> (accessed 8 January 2017).

EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2016c), *Comorbidity of substance use and mental health disorders in Europe: perspectives on drugs* (available at [http://www.emcdda.europa.eu/system/files/attachments/2639/Comorbidity\\_POD2016.pdf](http://www.emcdda.europa.eu/system/files/attachments/2639/Comorbidity_POD2016.pdf); accessed 27 December 2016).

ESPAD group (2016), *ESPAD report 2015: results from the European school survey project on alcohol and other drugs*, Publications Office of the European Union, Luxembourg.

ESPAD (European School Survey Project on Alcohol Other Drugs) and EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) (2017), *ESPAD report 2015 additional tables* (available at <http://www.espad.org/report/table-29b-frequency-lifetime-use-illicit-drugs-gender-2015-percentages>; accessed 14 March 2017).

Espinet, S. D., Motz, M., Jeong, J. J., Jenkins, J. M. and Pepler, D. (2016), 'Breaking the cycle of maternal substance use through relationships: a comparison of integrated approaches', *Addiction Research & Theory* 24, pp. 375-388.

Fazel, S., Bains, P. and Doll, H. (2006), 'Substance abuse and dependence in prisoners: a systematic review', *Addiction* 101, pp. 181-191.

Ferri, M., Bo, A., Montanari, L. and Roland, S. (2015), 'The importance of developing a reliable knowledge base in the treatment offered: the EU experience' in O'Neil, A. L. and Lucas, J. (eds), *DAWN drugs and alcohol women network: promoting a gender responsive approach to addiction*, United Nations Interregional Crime and Justice Research Initiative (UNICRI), Turin. pp. 222-244.

Fountain, J., Bashford, J., Underwood, S., Khurana, J., Winters, M., Patel, K., and Carpentier, C. (2002), *Update and complete the analysis of drug use, consequences and correlates amongst minorities. Volume 1- Synthesis. EMCDDA scientific report* (available at [http://www.emcdda.europa.eu/attachements.cfm/att\\_2691\\_EN\\_vol1\\_drugs\\_minorities.pdf](http://www.emcdda.europa.eu/attachements.cfm/att_2691_EN_vol1_drugs_minorities.pdf); accessed 12 October 2017).

Gilchrist, G., Blazquez, A., Pons Rabasa, A., Coronado, M., Colom, J. and Torrens, M. (2015), 'Sex differences in barriers to accessing substance abuse treatment, a qualitative study', in O'Neil, A. L. and Lucas, J. (eds), *DAWN drugs and alcohol women network: promoting a gender responsive approach to addiction*, United Nations Interregional Crime and Justice Research Initiative (UNICRI), Turin, pp. 176-194.

González-Guarda, R. M., Florom-Smith, A. L. and Thomas, T. (2011), 'A syndemic model of substance abuse, intimate partner violence, HIV infection, and mental health among Hispanics', *Public Health Nursing* 28, pp. 366-378.

Grace, S., Page, G., Lloyd, C., Templeton, L., Kougali, Z., McKeganey, N., Liebling, A. et al. (2016), 'Establishing a "Corstonian" continuous care pathway for drug using female prisoners: linking drug recovery wings and women's community services', *Criminology & Criminal Justice* 16, pp. 602-621.

Greenfield, S. F., Manwani, S. G. and Nargiso, J. E. (2003), 'Epidemiology of substance use disorders in women', *Obstetrics and Gynecology Clinics* 30, pp. 413-446.

Greenfield, S. F., Brooks, A. J., Gordon, S. M., Green, C. A., Kropp, F., McHugh, R. K., Lincoln, M., et al. (2007), 'Substance abuse treatment entry, retention, and outcome in women: a review of the literature', *Drug and Alcohol Dependence* 86, pp. 1-21.

Greenfield, S. F., Rosa, C., Putnins, S. I., Green, C. A., Brooks, A. J., Calsyn, D. A., Cohen, L. R., et al. (2011), 'Gender research in the National Institute on Drug Abuse National Treatment Clinical Trials Network: a summary of findings', *The American Journal of Drug and Alcohol Abuse* 37, pp. 301-312.

Grella, C., Scott, C., Foss, M. and Dennis, M. (2008), 'Gender similarities and differences in the treatment, relapse, and recovery cycle', *Evaluation review* 32, pp. 113-137.

Grella, C. E. and Stein, J. A. (2013), 'Remission from substance dependence: differences between individuals in a general population longitudinal survey who do and do not seek help', *Drug and Alcohol Dependence* 133, pp. 146-153.

Grella, C. (2015), 'Gender responsive treatment approaches for women with substance use disorders', pp. 141-175, in O'Neil, A. L. and Lucas, J. (eds.), *DAWN drugs and alcohol women network: promoting a gender responsive approach to addiction*, United Nations Interregional Crime and Justice Research Initiative (UNICRI), Turin.

Gyarmathy, V. A., Giraudon, I., Hedrich, D., Montanari, L., Guarita, B. and Wiessing, L. (2009), 'Drug use and pregnancy — challenges for public health', *Euro Surveillance* 14, pp. 33-36.

Haider, H. (2008), *Violence against women interventions*, Governance and Social Development, Resource Centre (GSDRC), Birmingham.

International Network of People Who Use Drugs (INPUD) (2014), *A war on women who use drugs*, INPUD, London.

Jonas, S., Bebbington, P., McManus, S., Meltzer, H., Jenkins, R., Kuipers, E. and Brugha, T. (2011), 'Sexual abuse and psychiatric disorder in England: results from the 2007 Adult Psychiatric Morbidity Survey', *Psychological Medicine* 41, pp. 709-719.

Jones, A., Weston, S., Moody, A., Millar, T., Dollin, L., Anderson, T. and Donmall, M. (2007), *The drug treatment outcomes research study (DTORS): baseline report*, Home Office, London.

Kensy, J., Stengel, C., Nougier, M. and Birgin, R. (2012), *Drug policy and women: addressing the negative consequences of harmful drug control*, International Drug Policy Consortium, London.

Kolind, T. and Duke, K. (2016), 'Drugs in prisons: exploring use, control, treatment and policy', *Drugs, Education, Prevention and Policy* 23, pp. 89-92.

Krans, E. E., Bogen, D., Richardson, G., Park, S. Y., Dunn, S. L. and Day, N. (2016), 'Factors associated with buprenorphine versus methadone use in pregnancy', *Substance Abuse* 37, pp. 550-557.

Messina, N., Grella, C. E., Cartier, J. and Torres, S. (2010), 'A randomized experimental study of gender-responsive substance abuse treatment for women in prison', *Journal of Substance Abuse Treatment* 38, pp. 97-107.

Mir, J., Kastner, S., Priebe, S., Konrad, N., Ströhle, A. and Mundt, A. P. (2015), 'Treating substance abuse is not enough: comorbidities in consecutively admitted female prisoners', *Addictive Behaviors* 46, pp. 25-30.

Montanari, L., Guarita, B., Kalamara, E., Matias, J. and Giraudon, I. (2015), *Overview of gender-related data on drug use and drug related problems in the EU*, Abstract presented at the EMCDDA Extended Reitox Network Meeting, Lisbon, 24 November 2015.

Najavits, L. M. (2009), 'Psychotherapies for trauma and substance abuse in women: review and policy implications', *Trauma, Violence & Abuse* 10, pp. 290-298

Neale, J., Nettleton, S. and Pickering, L. (2014), 'Gender sameness and difference in recovery from heroin dependence: a qualitative exploration', *International Journal of Drug Policy* 25, pp. 3-12.

National Institute on Drug Abuse (NIDA) (2016), *Substance use in women*, Research report series (available at <https://www.drugabuse.gov/publications/research-reports/substance-use-in-women/summary>; accessed 14 January 2017).

North Inner City Drugs Task Force (2014). SAOL Project (online), NICDTF (<http://www.nicdtf.ie/PROJECTS/PROJECTS/SAOL.html>; accessed 12 October 2017).

Pinkham, S., Stoicescu, C. and Myers, B. (2012), 'Developing effective health interventions for women who inject drugs: key areas and recommendations for program development and policy', *Advances in Preventive*

Medicine (available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3501794/>; accessed 10 September 2017).

Ragazza (n.d.), *Welcome to ragazza (e.V.)!*, <http://ragazza-hamburg.de/> (accessed 8 March 2017).

Rhodes, T., Platt, L. and Filatova, K. (2002), *Behavior factors in HIV transmission in Eastern Europe and Central Asia*, UNAIDS, Geneva.

Roarty, L. and Sagers, S. (2009), *Evaluation of services to culturally and linguistically diverse (CALD) women with comorbid mental health and drug and alcohol issues*, National Drug Research Institute, Perth, Australia.

Roberts, A., Mathers, B. and Degenhardt, L. (2010), *Women who inject drugs: a review of their risks, experiences and needs*, National Drug and Alcohol Research Centre (NDARC), Sydney, New South Wales.

Rolando, S., Rena, A., O'Neil, A. L., Beccaria, F., and Smith, C. J. (2016), 'Exploring the level of gender mainstreaming in the working agenda of substance use treatment centres in Italy', *Italian Journal of Gender-Specific Medicine* 2, pp 154-157.

Reis Machado, J., da Silva, M. V., Cavellani, C. L., Antônia dos Reis, M., Monteiro, M. L. G. D. R., Teixeira, V. D. P. A. and Rosa Miranda Corrêa, R. (2014), 'Mucosal immunity in the female genital tract, HIV/AIDS', *BioMed Research International* (available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4181941/>; accessed 12 October 2017).

Salvati, D. and Sabet, K. (2015), 'Gender equality and the advancement of women: key international instruments and documents focused on gender differences', in O'Neil, A. L. and Lucas, J. (eds), *DAWN drugs and alcohol women network: promoting a gender responsive approach to addiction*, United Nations Interregional Crime and Justice Research Initiative (UNICRI), Turin pp. 29-37.

Shihadeh, T. (2015), 'Successful examples of promoting gender-responsive approaches to drug treatment programs', in O'Neil, A. L. and Lucas, J. (eds), *DAWN drugs and alcohol women network: promoting a gender responsive approach to addiction*, United Nations Interregional Crime and Justice Research Initiative (UNICRI), Turin pp. 210-221.

Selbekk, S. A. (2016), *Troubled families and individualised solutions? An ontological, discursive and interactionist analysis of families' involvement in alcohol and other drug treatment*, doctoral thesis, Faculty of Social Sciences, University of Stavanger, Norway.

Sherman, S., Latkin, C. and Gielen, A. (2001), 'Social factors related to syringe sharing among injecting partners: a focus on gender' *Substance Use & Misuse* 36, pp. 2113-2136.

Slesnick, N. and Zhang, J. (2016), 'Family systems therapy for substance-using mothers and their 8-to 16-year-old children', *Psychology of Addictive Behaviors* 30, p. 619.

Springer, S. A., Larney, S., Alam-Mehrjerdi, Z., Altice, F. L., Metzger, D. and Shoptaw, S. (2015), 'Drug treatment as HIV prevention among women and girls who inject drugs from a global perspective: progress, gaps, and future directions', *Journal of Acquired Immune Deficiency Syndromes* 69, pp. 155-161.

Stover, H. and Hariga, F. (2016), 'Prison-based needle and syringe programmes (PNSP) — still highly controversial after all these years', *Drugs: Education, Prevention and Policy* 23, pp. 103-112.

Tarján, A., (2013), 'Responses to health correlates and consequences' in Csákó, I., Elekes, Z., Frech, A., Grezsa, F., Rácz, J., Ritter, I. and Szemelyácz, J. (eds.), *"Hungary" New developments, trends and in-depth information on selected issues: 2012 national report to the EMCDDA by the Reitox National Focal Point* (available at [http://www.emcdda.europa.eu/system/files/publications/797/HU\\_National\\_Report\\_2012\\_448261.pdf](http://www.emcdda.europa.eu/system/files/publications/797/HU_National_Report_2012_448261.pdf) en; accessed 12 October 2017).

The Tavistock and Portman NHS Foundation Trust (n.d.), *Family Drug and Alcohol Court (FDAC)*, <https://www.drugabse.gov/related-topics/women-drugs> (accessed 10 March 2017).

Timko, C., Valenstein, H., Lin, P. Y., Moos, R. H., Stuart, G. L. and Cronkite, R. C. (2012), 'Addressing substance abuse and violence in substance use disorder treatment and batterer intervention programs', *Substance Abuse Treatment, Prevention and Policy* (available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3489609/>; accessed 12 October 2017).

Tompkins, C. N. and Neale, J. (2016), 'Delivering trauma-informed treatment in a women-only residential rehabilitation service: qualitative study', *Drugs: Education, Prevention and Policy* <http://dx.doi.org/10.1080/09687637.2016.1235135>

Tuchman, E. (2010), 'Women and addiction: the importance of gender issues in substance abuse research', *Journal of Addictive Diseases* 29, pp. 127-138.

United Nations Office on Drugs and Crime (UNODC) (2004), *Substance abuse treatment and care for women: case studies and lessons learned*, UNODC, Vienna.

United Nations Office on Drugs and Crime (UNODC) (2008), *Handbook for prison managers and policymakers on women and imprisonment*, Criminal Justice Handbook Series, UNODC, Vienna.

United Nations Office on Drugs and Crime (UNODC) (2012), *HIV prevention, treatment and care in prisons and other closed settings: a comprehensive package of interventions*, UNODC, Vienna.

United Nations Office on Drugs and Crime (UNODC) (2016), *Guidelines on drug prevention and treatment for girls and women*, UNODC, Vienna.

United Nations Office on Drugs and Crime and World Health Organization (UNODC and WHO) (2016), *International standards for the treatment of drug use disorders: draft for field testing* (available at [https://www.unodc.org/documents/commissions/CND/CND\\_Sessions/CND\\_59/ECN72016\\_CRP4\\_V1601463.pdf](https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_59/ECN72016_CRP4_V1601463.pdf); accessed 4 January 2017).

Wendell, A. (2013), 'Overview and epidemiology of substance abuse in pregnancy', *Clinical Obstetrics and Gynecology* 56, pp. 91-96.

Women's Health Council (2009), *Clinical obstetrics and gynecology*, Women's Health Council, Dublin.

WHO (2009), *Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence*, World Health Organization, Geneva.

WHO (2014), *Guidelines for the identification and management of substance use and substance use disorders in pregnancy*, World Health Organization, Switzerland.

WHO Regional Office for Europe (2009), *Women's health in prison: correcting gender inequity in prison health*, WHO Regional Office for Europe, Copenhagen.

WHO Regional Office for Europe and the Pompidou Group (2002), *Prisons, drugs and society: a consensus statement on principles, policies and practices*, WHO Regional Office for Europe, Bern.

Zedler, B. K., Mann, A. L., Kim, M. M., Amick, H. R., Joyce, A. R., Murrelle, E. L. and Jones, H. E. (2016), 'Buprenorphine compared with methadone to treat pregnant women with opioid use disorder: a systematic review and meta-analysis of safety in the mother, fetus and child', *Addiction* 111, pp. 2115-2128.

Zermiani, M., Gomma, M., Simeoni, E., and Serpelloni, G. (2013), 'Evaluation of care services provided to female patients by Drug Addiction Department: a national explorative survey', *Journal of Applied Medical Sciences* 2, pp. 11-23.